

AIR WAR COLLEGE

AIR UNIVERSITY

COMMUNICATING WHY:
ALIGNING THE AIR FORCE MESSAGE

by

Wayne W. Straw, Col, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Col Ronald L. Banks

17 February 2015

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 17 FEB 2015	2. REPORT TYPE		3. DATES COVERED 00-00-2015 to 00-00-2015		
4. TITLE AND SUBTITLE Communicating Why: Aligning The Air Force Message			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air War College,,Air University,,Maxwell AFB,,AL			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT In the last two years, the Air Force released three strategic documents that describe who comprises the service, what the Air Force does, how it does it, and where it needs to go. For those familiar with Simon Sinek's book Start with Why, there is an obvious omission from all three of these foundational documents-why? WHY the Air Force-or any organization-does what it does is harder to express and articulate than WHAT or HOW, but Sinek argues it can be discovered by looking to the past at the life experience of an individual or small group. The life experiences of Brigadier General William 'Billy' Mitchell as a Major in World War I France provide the genesis for the Air Force's WHY. Witnessing the bloodbath and slaughter from both the ground and aerial perspective caused an evolution in Mitchell's thinking about mass warfare and the supremacy of human blood and bone in combat. Modern warfare was an affront to America's WHY-life, liberty, and the pursuit of happiness. Under his influence and leadership, the Army Aviation Section of the Signal Corps and its follow-on, the Army Air Service, would preserve lives (WHY), both American and otherwise.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 29	19a. NAME OF RESPONSIBLE PERSON
a REPORT unclassified	b ABSTRACT unclassified	c THIS PAGE unclassified			

DISCLAIMER

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the US government, the Department of Defense, or Air University. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Biography

Colonel Wayne Straw is assigned to the Air War College, Air University, Maxwell AFB, AL. Prior to his school assignment, he was the Vice Commander, Squadron Officer College, Maxwell AFB, AL. Colonel Straw was commissioned through Officer Training School in 1993, and after a tour as a Security Police Flight Commander at Kirtland AFB, NM, he graduated from Specialized Undergraduate Navigator Training in 1996. He flew the F-15E as a Weapon Systems Officer and graduated from the USAF Weapons School in 2000. Colonel Straw is a Master Navigator with over 2,000 flying hours, almost 700 of which were in combat supporting Operations ENDURING FREEDOM, IRAQI FREEDOM, NORTHERN WATCH, and SOUTHERN WATCH. He has two tours in Afghanistan, including a year in command of the Operations Support Squadron at the busiest airfield in the country and a year as an Afghanistan Pakistan Hand embedded with the Combined Forces Special Operations Component Command-Afghanistan working with special operations forces and Afghans at the village, district, provincial, and national levels. His staff experience includes responsibilities at the Numbered Air Force, Component Command, and Geographic Combatant Command levels. He holds a Bachelor of Science in Business from Wake Forest University, Master of Business Administration from Florida State University, Master of Arts in National Security and Strategic Studies from the College of Naval Command and Staff, and Master of Airpower Art and Science from the School of Advanced Air and Space Studies.

Abstract

In the last two years, the Air Force released three strategic documents that describe who comprises the service, what the Air Force does, how it does it, and where it needs to go. For those familiar with Simon Sinek's book *Start with Why*, there is an obvious omission from all three of these foundational documents—why? WHY the Air Force—or any organization—does what it does is harder to express and articulate than WHAT or HOW, but Sinek argues it can be discovered by looking to the past at the life experience of an individual or small group. The life experiences of Brigadier General William “Billy” Mitchell as a Major in World War I France provide the genesis for the Air Force's WHY. Witnessing the bloodbath and slaughter from both the ground and aerial perspective caused an evolution in Mitchell's thinking about mass warfare and the supremacy of human blood and bone in combat. Modern warfare was an affront to America's WHY—life, liberty, and the pursuit of happiness. Under his influence and leadership, the Army Aviation Section of the Signal Corps and its follow-on, the Army Air Service, would preserve lives (WHY), both American and otherwise. Today, the Air Force does this not via technology or innovation, but by exploiting the operating environments that are untethered from terrestrial constraints (i.e. air, space, and cyberspace) in order to provide alternatives and options to civilian leaders that preserve as many lives as practicable (HOW). The five core missions describe WHAT the Air Force does. The challenge for the Air Force is to start with WHY it does WHAT it does, infuse it throughout every aspect of the organization, and remain true to it. Otherwise, the Air Force will continue to be misaligned, working from the outside of Sinek's Golden Circle, starting with WHAT, sometimes discussing HOW (although without consensus), and never inspiring with WHY.

Introduction

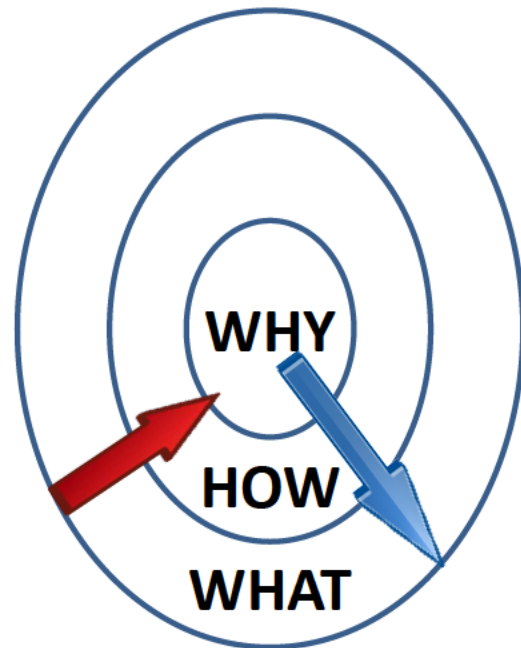
In the Foreword to the United States Air Force's most recent strategic document, "America's Air Force: A Call to the Future," the Chief of Staff of the Air Force (CSAF), General Mark A. Welsh, III, starts his letter to Airman and Airpower Advocates by highlighting the significance of two recent documents that help define the United States Air Force for the twenty-first century.¹ The Chief informs the reader that "the first, [The World's] Greatest Air Force – Powered by Airmen, Fueled by Innovation, describes *who we are*," while "the second document, Global Vigilance, Global Reach, Global Power for America, describes *what we do*" [emphasis added]. Thus, with the underpinning laid, the Chief explains the purpose of the newest strategic document as detailing the Air Force's core missions and "*how*...we provide enduring contributions to American security" [emphasis added]. Furthermore, the document builds upon "who we are" and "what we do" by providing a general path to "where we need to go."² For those familiar with Simon Sinek's book *Start with Why*, or who watched his TED Talk on the same subject, there is an obvious omission from all three of these foundational documents—*why*?³

Start with Why

For those not familiar with Sinek's thesis, he argues that the vast majority of companies and organizations try to sell us WHAT* they do, while a minority of great companies, organizations, and individuals inspire their personnel by starting with WHY they do WHAT they do and infusing it throughout every aspect of their organizations.⁴ Utilizing a model he calls the Golden Circle to illustrate the relationship between an organization's purpose and its products, he defines each component as follows: WHY is an organization's purpose, cause, or belief;

* In his book, Sinek utilized all capital letters for the words WHAT, HOW, and WHY when referring to what he termed an organization's Golden Circle. When those words were utilized outside of that context, they were not capitalized. This paper will use Sinek's formatting methodology for simplification and understanding.

HOW is the actions taken to realize the belief; and WHAT is the result of the actions, incorporating everything the organization says and does, including its products, services, marketing, public relations, and culture.⁵ Most organizations communicate from the outside in, leading with WHAT they do, and sometimes getting to HOW; but few communicate from the inside out, starting with the WHY behind their product or service and resulting in WHAT as the tangible proof of the belief.⁶ WHY a company or organization does WHAT it does is much deeper than WHAT or HOW it does it.⁷ Given this brief introduction to the Golden Circle and the Air Force's omission of WHY from its three most recent strategic documents, it is appropriate to ask WHY the Air Force does WHAT it does? It is not an easy question to answer.



Sinek's Golden Circle

If asked, most Airmen would respond by describing WHAT the Air Force does or WHAT they do personally; some might reference the Air Force's core values (integrity first, service before self, and excellence in all we do); others may recite its five missions (air and space superiority; intelligence, surveillance, and reconnaissance; rapid global mobility; global strike; and command and control); and fewer yet would be able to articulate HOW the Air Force does WHAT it does. Virtually none would start with WHY, and even if they did, there would not be agreement on what the WHY is. WHAT and HOW responses should not be surprising since most highly successful companies or organizations, like the Air Force, become experts in WHAT they do, and not coincidentally, they know HOW to do it better than anyone else.⁸ Thus, a

myriad of inconsistent answers actually reflects to some degree, a level of success one might expect from the world's greatest air force.⁹ Unfortunately, such answers also reveal confusion regarding WHAT the Air Force is doing and WHY it is doing it. Its WHY and WHAT are no longer aligned because its WHY has gone fuzzy.¹⁰

WHY the Air Force—or any organization—does WHAT it does is harder to express and articulate than WHAT or HOW because of the way our brains function.¹¹ The limbic part of the brain is where human feelings and decision-making take place, but unfortunately it has no language skills.¹² The neocortex, on the other hand, has tremendous capacity for rational, analytical thought as well as language skills, which explains why it is so easy to talk about—and understand—WHAT an organization does (e.g., the Air Force's core missions).¹³ Thus, our biological composition complicates our ability to express ourselves when it comes to our purpose, cause, or belief, which is what Sinek means by an organization's WHY.¹⁴ No wonder the Air Force has published three foundational documents describing WHAT it does and HOW it does it, working from the outside of Sinek's Golden Circle toward the center rather than vice versa.

The Air Force has a lot of company in this regard because most organizations think, act, and communicate from the outside in, from WHAT, which is clear and easy to express, sometimes saying HOW, but rarely getting to WHY they do WHAT they do.¹⁵ Inspired organizations and leaders, on the other hand, work from the inside out, starting with WHY.¹⁶ Caution must be exercised, however, not to confuse the WHY with an organization's results. In other words, a company's WHY is not to make money, which is an outcome or result. Similarly, the Air Force's WHY is not to win the nation's wars or to defend the United States; those too are results. This is not to say that making money is not vital to a company's continued existence, or

the Air Force's responsibilities to win wars and defend the country are not important, but they are not the belief behind the WHY.

As difficult as it is to convey an organization's WHY, it should not be a surprise that some have tried, but failed to convey it for the Air Force. For example, a 2010 RAND summer study co-led by Andrew Hoehn (then-Vice President, RAND Project AIR FORCE) and Simon Sinek himself concluded "the Air Force serves the nation best when it creatively marshals its human capital and material resources to provide the President and his advisors with innovative, implementable solutions to developing, tough national security challenges."¹⁷ Emerging from that study, Paula G. Thornhill, a retired Air Force brigadier general now working in RAND's Project Air Force division, published an Occasional Paper in 2012 titled, "Over not Through: The Search for a Strong, Unified Culture for America's Airmen." She concluded, "the Air Force's core *why*, then, is to help identify large national security problems, then to find and deliver better ways of addressing them to bolster the common defense" [*italics in original*].¹⁸ Finally, in 2014, twenty-four competitively selected Air Force captains from a class of over 700 Squadron Officer School students tackled the issue for the Class 14E Think Tank and briefed their results to General Larry Spencer, the Vice Chief of Staff of the Air Force, in October 2014. Their proposed WHY was, "Born of Necessity, Grown through Innovation, Eyes on the Horizon."¹⁹ Although each offering addresses some aspects of WHAT and HOW, none of them get to the intuitive WHY of the United States Air Force.

Sinek argues the WHY does not come from looking ahead and figuring out a strategy to tackle a problem, nor does it come from market research or interviews with employees, but rather from the past, born of the life experience of an individual or small group.²⁰ This explains why, over time, the discipline to stay true to one's purpose, cause, or belief is the difficult part; it

is why so many companies depart from their *raison d'être* after their founder retires or dies (e.g., Wal-Mart, Dell, Starbucks, and even Apple when Steve Jobs retired the first time).²¹ In other words, to discover and articulate the Air Force's WHY requires both an understanding of American history and a thorough examination of the life experiences of the man regarded by many as the Air Force's founding father, Brigadier General William "Billy" Mitchell.

America's WHY

In his first draft of the Declaration of Independence, Thomas Jefferson commenced his justification for separation from Great Britain with the following words: "We hold these truths to be sacred & undeniable; that all men are created equal & independent, that from that equal creation they derive rights inherent & inalienable, among which are the preservation of life, & liberty, & the pursuit of happiness."²² After edits by the declaration committee, the result was one of the most famous lines ever written: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." It is America's WHY. Life, Liberty and the Pursuit of Happiness. No other country in the world ever penned such a radical and far-reaching belief in the value of mankind, even if it was self-evident. Forged by the crisis for independence, the founding fathers of "these united States of America" declared their intent to fight for those Rights. Blood would be shed and lives would be lost in order to assure the preservation of future life, liberty, and happiness. One hundred and forty years after this famous declaration, on the precipice of its entrance into the First World War, America faced a crisis that threatened its WHY. From this crisis, well before service independence became his *cause célèbre*, Billy Mitchell defined the Air Force's WHY.

Discovering the Air Force's WHY

Billy Mitchell is well known for his outspoken advocacy for airpower and an independent air force; however, his views—like the airplanes he eventually flew—developed iteratively. As a highly successful officer in the US Army Signal Corps and the youngest officer on the Army's General Staff, Captain Billy Mitchell testified before Congress in 1913 to oppose independent service status for the first military air component in history, the Aeronautical Division of the US Army Signal Corps (established in 1907). Congress concurred with his view. Furthermore, due to the high risk of serious injury or death, Mitchell helped shape a law in 1914 to restrict flight training to bachelor Lieutenants under the age of 30.²³ Ironically, this meant newly promoted Major Billy Mitchell—who was 36 and married—was ineligible for military-funded instruction when he decided to learn to fly in September, 1916. Mitchell took private lessons from Curtis Aviation at great personal expense (almost \$32,000 in inflation adjusted terms),²⁴ but with 18 years of distinguished US Army service already under his belt, he was one of the most knowledgeable officers to join the ranks of the couple dozen young pilots in the entire Army.²⁵

Only two months after qualifying as a rookie pilot—and still without his wings—the Army decided to send Mitchell to neutral Spain in mid-January 1917; he set sail from Cuba in March. His mission was to make his way to France to observe the state of British and French aviation.²⁶ The United States was still an isolationist country, wary of getting involved in the European continent's war, but the resumption of unrestricted submarine warfare by German U-boats against vital American shipping forced her to intervene almost three years after the war began. The US Congress declared war on the Imperial German Government on 6 April 1917; Billy Mitchell crossed into France that very day and arrived in Paris on 10 April 1917.²⁷ Shortly after his arrival, on 20 April 1917, Mitchell began a 10-day tour of the French sector of the

battlefield. His timing could not have been better. Just four days prior, the new commander-in-chief of the French armies on the Western Front, General Robert Nivelle, had launched an offensive that would eventually bear his name.

The Nivelle Offensive was conceived by the same general who oversaw the French counteroffensive at Verdun in late 1916. Although successful in recapturing ground lost to the German offensive in early 1916, the 299-day Battle of Verdun ultimately cost an estimated 400,000 casualties each to the French and German sides. One of the most costly battles of the war, it became symbolic of the needless waste of life that was bleeding France dry and destroying the French infantryman's morale. But Nivelle hoped to employ the same offensive ideas he used to restore the battlefield to its stalemated lines in late 1916, to end the war in 1917. The offensive promised to break through the German lines within 48 hours at a cost of less than 10,000 lives. The first day alone cost France 90,000 casualties.²⁸ Mitchell was an eyewitness to the carnage during part of the offensive in what he called, "ten tremendously eventful days in my life, April 20 to 30, 1917."²⁹

On 22 April 1917 Mitchell took part in a French infantry attack and observed, "Life could not exist in the presence of the dreadful weapons of modern war....What struck me most forcibly was the utter helplessness of the infantry when attacking over open ground, against modern machine guns and cannon."³⁰ Two days later, Mitchell got a chance to view the offensive from the air in a French observation aircraft. After his flight, he recorded, "To even stick one's head over the top of the trench invited death. This whole area over which the Germans and French battled was not more than sixty miles across. It was as though they kept knocking their head against a stone wall, until their brains were dashed out. They got nowhere, as far as ending the war was concerned."³¹ On 25 April 1917 Mitchell toured some former German trenches and

noted, "Between the lines lay many inert forms, those especially brave ones who had paid the forfeit for their unsuccessful daring."³² On 30 April 1917 he travelled to the Mt. Sinai Observatory, positioned 350 feet above the plain and 7,000 yards from the line of battle.³³ Utilizing the telescopes to observe the offensive, he concluded, "...there must have been at least fifty percent casualties in the assaulting columns. There were at least four thousand men deployed from each of the seven divisions attacking, and therefore, about fourteen thousand were killed or wounded that afternoon while I watched, with the number constantly increasing as the evening wore away."³⁴ Summing up the day's events, Mitchell commented, "The attack impressed me as a very well-managed affair, tactically, for a frontal fight such as it was. From a strategical standpoint, however, there was no doubt that it was another piecemeal affair, and merely resulted in a great waste of life, without accomplishing any lasting result." In May, he visited the British Army with similar observations: "Ambulances were passing to and fro, carrying back the wounded, the little packages of flesh and bone which still contained a certain amount of life."³⁵ Witnessing the bloodbath and slaughter caused an evolution in Mitchell's thinking about mass warfare.³⁶

When he visited the French artillery on 27 April 1917 Mitchell concluded, "War on the ground is an obsolete system and improvement must come through the air."³⁷ Two days later after spending time at an aerodrome under the care of the French Air Service, the neophyte pilot reflected back on the antiquated flying machines in the US Army inventory and the limited number of his peers. He realized, "The whole thing was a straight military problem: it was necessary to have command of the air; the enemy had such a force, we had to have an equal force. The lessons of the last three years made this no longer a matter of guesswork, but a sure thing," noting that the Aviation Section of the US Signal Corps "should have had between eight

and ten thousand planes on the line all the time.”³⁸ The French, for their part, “wanted us to bring our pilots over just as fast as we could train them, as they felt that the war could be ended only by a decision in the air.”³⁹

Mitchell’s flight over the battlefield—which included evading attack from both German pursuit aircraft and anti-aircraft artillery—undoubtedly made a lasting impression on the junior pilot and on the role airpower could play.⁴⁰ Mitchell was surprised by the clarity of the aerial perspective, the speed with which they were able to transit the battlefield, the range offered by aviation, and the ability to avoid the stagnation below. That evening, he wrote, “One flight over the lines gave me a much clearer impression of how the armies were laid out than any amount of traveling around on the ground. A very significant thing to me was that we could cross the lines of these contending armies in a few minutes in our airplane, whereas the armies had been locked in the struggle, immovable, powerless to advance, for three years. It looked as though the war would keep up indefinitely until either the airplanes brought an end to the war or the contending nations dropped from sheer exhaustion.”⁴¹ For the Nivelle Offensive, the latter came first. After 24 days of futile effort to breach the German defenses, the offensive was called off on 9 May 1917. Wrecked French morale manifested itself by mutinies that began on 29 April 1917 and eventually enveloped a calamitous half of the French army. Nivelle was relieved of command on 15 May 1917 amidst the loss of an estimated 300,000 French soldiers.⁴²

Mitchell had been “the first regular American officer to participate in an attack with the French, as well as the first to cross the German lines in an airplane and the first to be decorated with the War Cross for duty on the field of battle.”⁴³ But as the first American to witness the atrocities of trench warfare from both the ground and aerial perspective, the experiences left an indelible mark on him that contrasted sharply with his pre-war thinking. In 1915, before the

United States entered the war, Mitchell wrote from the geographically isolated United States that the American people “must not forget that ‘only human blood and bone’ were able to do the job in modern warfare.”⁴⁴ Even though he recognized the Great War for what it was: a war of attrition that would be won by the side which could “supply for the longest time, well-trained and disciplined officers and men for its field armies,”⁴⁵ his perspective changed on the front lines of France. Mitchell witnessed the loss of life first hand and his view regarding the supremacy of human blood and bone changed radically, another casualty of the Nivelle Offensive.

The Air Force’s WHY

Modern warfare was an affront to the principles laid out in the Declaration of Independence; it was antithetical to America’s WHY. Mitchell knew there had to be a better way than throwing more human blood and bone at the problem. Following those most eventful 10 days in April 1917, he recognized the Army Aviation Section’s WHY, HOW and WHAT, and it all started with WHY. Under his influence and leadership, the Army Aviation Section of the Signal Corps and its follow-on, the Army Air Service, would preserve lives (WHY). It is important to note that there are no caveats regarding what type of life (i.e. just American lives, allied or coalition lives, or friendly lives); it is all lives. Anything else would be anathema to the principles articulated in America’s Declaration of Independence and its Constitution. America values each human and their right to life. This should not, however, be construed as reluctance to take life from those who challenge what Americans view as universal, inalienable Rights. Certainly World War II demonstrated the commitment of the nation and the members of the US Army Air Forces to defend those values while taking many lives, but there was always the will, if not the ability, to avoid noncombatant casualties and to take as few lives as was necessary to accomplish the mission. The Air Force’s WHY—the preservation of life—is its original visceral

purpose, cause or belief. The WHY never changes, nor will it.⁴⁶ The discipline to never veer from the cause, on the other hand, and to hold the organization accountable to HOW it does things, is the hard part.⁴⁷ Therefore, the greater challenge—once an organization knows WHY it does what it does—is HOW to do it.⁴⁸

The Air Force's HOW

HOWs are the principles and values that guide the way an organization's cause is brought to life.⁴⁹ They manifest themselves in the systems and processes within an organization, as well as through its culture.⁵⁰ Airmen may be inclined to identify technology as the Air Force's HOW, and for good reason—no other military service is so closely associated with technology and innovation. In a 2014 survey conducted by RAND's Project Air Force, 50% of the 1,930 respondents chose the Air Force as the service they most associated with advanced technologies; the US Navy was a distant second at 17%.⁵¹ The CSAF even played an Air Force commercial at the 2014 Air Force Association Air and Space Conference highlighting the Air Force's reputation for high technology. The video shows Captain Eric Brown, a cyberspace weapons officer, who introduces himself and then states, "I've always seen the Air Force as the technology service, so the decision to join the Air Force in college was an obvious choice for me. I would not have the opportunity to do the things I'm passionate about in the private sector."⁵² The question is WHY? WHY does Captain Brown plan, train for, and execute cyberspace operations for the United States Air Force? His explanation went straight to WHAT, explaining that, "Air and space superiority would not be possible without the requisite cyberspace infrastructure, or the ability to cause non-kinetic cyberspace effects in support of air superiority." This is not to say a technology focus is unnecessary, but as noted strategist Colin Gray points out, "the balance is wrong if that focus translates into practice into an air force that bears some

resemblance to a costly and exclusive combination flying club and science and engineering society at the expense of what should be the dominant features of a fighting force.”⁵³

Airmen may also be inclined to identify innovation as the Air Force’s HOW, after all the service could not have demonstrated its WHY without it. For example, Lt Col Jimmy Doolittle proposed an innovative response to the Japanese attack on Pearl Harbor by modifying land based B-25 aircraft and launching them from an aircraft carrier, forcing the Japanese to allocate precious resources to the defense of their homeland, giving the United States time, and saving many lives. Capt Ross Greening designed a surprisingly accurate low altitude bomb sight out of two pieces of aluminum at a cost of 20 cents each for the 16 aircraft in the Doolittle Raid.⁵⁴ Later in the war, General Doolittle’s first order as the newly appointed commander of the 8th Air Force was to free the fighters from their strict bomber tether so they could go on the offensive against the German fighters.⁵⁵ As Doolittle later noted, the German General of the Fighter Force, Adolf Galland, said, “the day we took our fighters off the bombers and put them against the German fighters, that is, went from defensive to offensive, Germany lost the air war.”⁵⁶ And Major General William H. Tunner, who oversaw the Berlin airlift, mitigated the notoriously bad German weather by requiring adherence to Instrument Flight Rules, setting missed approach procedures to prevent airborne traffic jams, and used ground control approach (GCA) to establish a level of control and precision that kept the conveyor belt of aircraft on speed and on time, exceeding his goal of 1,440 landings a day (one for every minute of the day).⁵⁷ His innovations not only broke the Soviet blockade, but also more importantly saved over 2 million Berliners. But innovation is—like technology—a means, not the HOW.

Finally, Airmen may look at the Air Force’s culture for its HOW. Paula Thornhill’s previously mentioned Project Air Force Occasional Paper reveals how difficult it has been for

the Air Force to remain accountable to its HOW. In her paper, she identified five distinct cultural identities associated with different historical eras rather than one dominant identity. They included, “‘over not through’ (World War I and immediate aftermath), ‘give me liberty’ (interwar period), ‘victory through airpower’ (World War II), ‘peace is our profession’ (Cold War), and ‘we are critical enablers’ (Operation Enduring Freedom and Operation Iraqi Freedom).”⁵⁸ Thornhill convincingly argues that the first, “‘over not through,” is the unifying cultural narrative that underpins the others because it traces its roots back to the Air Force’s origins, it is timeless, and has broad appeal. But as Thornhill would almost certainly agree, “‘over not through” is simply a fitting manifestation of the Air Force’s culture, which is an outcome or product of the Air Force’s HOW.

HOW the Air Force accomplishes its WHY is by exploiting the operating environments that are untethered from terrestrial constraints (i.e. air, space, and cyberspace) in order to provide alternatives and options to civilian leaders; options that achieve political objectives while preserving as many lives as practicable. The Air Force has a unique way of looking at war (i.e. an Airmen’s perspective) that involves fewer boundaries and mitigates the tyranny of time and distance; it is faster than land and sea power and utilizes air, space, and cyberspace; it includes deterrence and should that fail, compellence through unsurpassed precision to ensure greater enemy losses than American losses while mitigating noncombatant losses. Technology and innovation are critical components as well, but they are simply means, not ends. This is why “‘over not through” is an apropos cultural narrative that reflects the Air Force’s HOW.

The Air Force’s WHAT

The first Secretary of Defense, James Forrestal, formally established the Air Force’s WHAT in 1948 during a week-long meeting at Key West with the military service chiefs in order

to formally delineate the independent service's respective roles and missions.⁵⁹ Although Forrestal was unable to prevent some duplication, the subsequent Key West Agreement nevertheless demarcated the United States Air Force's WHAT as five missions.⁶⁰ The missions were 1) Air Superiority; 2) Air Reconnaissance; 3) Airlift; 4) Strategic Air Force; and 5) Coordination of Air Defense. The missions remain consistent 67 years later but have evolved to reflect the changing technology that so strongly influences HOW the Air Force accomplishes its WHY. The modified missions are, 1) Air and Space Superiority, 2) Intelligence Surveillance, and Reconnaissance; 3) Rapid Global Mobility; 4) Global Strike; and 5) Command and Control. These missions are clearly articulated and easy to understand, particularly by Airmen who perform them, but the Air Force's WHAT is not the problem, it is a lack of understanding WHY.

Misalignment

The Air Force's WHY remains unchanged, however, its message is not as clearly aligned with its WHY. An indicator of misalignment is apparent in an Air Force advertising campaigns which focus on the Air Force's WHAT, demonstrating an outside in approach to the Golden Circle. One Air Force commercial is even entitled, "United States Air Force—It's What We Do." The images of impressive Air Force assets and Airman performing high technology jobs is accompanied by a narrative, read by a man with a powerful, deep voice, stating:

We master GPS, stealth technology, precision weapons, and unmanned aircraft. We deliver over 53 million meals a year to Airman around the globe. We can see the license plate of a car from 50,000 feet above. We can be anywhere in the world in 30 minutes traveling at twice the speed of sound. We have hospitals in the sky. We build, launch, and command satellites. We battle 3 million cyber threats a day. We are first responders for relief efforts around the globe. We don't just defend America, we do the impossible every day.⁶¹

WHY does the Air Force master the Global Positioning System (GPS), stealth technology, precision weapons, and unmanned aircraft? Those technologies preserve lives. Some of our

most outspoken defenders come from other services, like General Stanley McChrystal, who credited GPS and intelligence, surveillance, and reconnaissance (ISR) from Predators as two of the three most significant changes to Joint Special Operations Command's success in Iraq (Night Vision Goggles were the third).⁶² GPS ensured the pinpoint navigational accuracy to insert special operations forces exactly where they needed to go whereas before GPS, just getting to the correct location was half the challenge.⁶³ Insertions in the wrong location or navigation through the wrong area cost lives; GPS mastery saves lives. In addition, the ISR provided by the MQ-1 Predator yielded a superior level of situational awareness while providing information on the pattern of life surrounding a compound. This not only saved American lives, but also prevented collateral damage that saved noncombatant lives as well.

Another advertisement, celebrating the Air Force's 65th birthday and aptly named "Faithful to a Proud Heritage," features soaring music and images of historical and contemporary aircraft and leaders, but the narrative leaves the viewer asking WHY:

It started with a vision of a force more powerful than the world had ever seen. A service, separate from all others. To dominate that, which had never been controlled before. A vision for doing the impossible. For pushing beyond the boundaries of human imagination. Where inspiration is found again...and again. Men and women with the courage to dream. To challenge the conventional wisdom. The dedication to see the job through. The commitment to freedom. The sacrifice to ensure success. Sixty-five years of answering the call, of innovation, of compassion. Airmen, standing on the shoulders of Airmen. The legends of yesterday...the legends yet to come. To those souls dreaming of the skies to conquer. So here's to the visionaries, the leaders, the warriors. Here's to the United States Air Force and to the vision of tomorrow.⁶⁴

Billy Mitchell did not start with a vision for a force more powerful than the world had ever seen; nor was his vision for a force separate from all others. The Air Force's existence as an independent service is an outcome, it "is one of the WHATs, one of the tangible things a founder or group of founders has done in their lives to prove their WHY."⁶⁵ Worse yet, the heritage in

the video is part of the Air Force's culture, and culture is an exemplar of HOW; the problem is there is no WHY.⁶⁶

In 2013 the Vice Chief of Staff of the Air Force, General Larry Spencer, kicked off a campaign entitled "Airmen Powered by Innovation," which encouraged Airmen from around the service to submit new ideas as part of the Air Force's Every Dollar Counts campaign.⁶⁷ The decision to associate innovation with cost-reduction, while seemingly innocuous, was unfortunate. The purpose of the campaign did not originate from the Air Force's WHY and move outward, but rather from the external constraints of budgetary pressures brought on by sequestration. In other words, the motive behind innovation was to save money in a fiscally austere environment when, historically, Air Force innovation was a means to achieving its WHY. Although efficiencies are important to any organization, they are not WHY the Air Force innovates. When innovation becomes a cost-reduction measure rather than a means to preserve life, there is bound to be misalignment.

Recognizing WHY

The Air Force should clearly articulate its WHY and educate Airmen on its successes like Operation DESERT STORM, which epitomized the Air Force's WHY. Prior to the conflict, then Chairmen of the Joint Chiefs of Staff Colin Powell cautioned President George H. W. Bush that a war to evict Saddam Hussein's forces from Kuwait would cost an estimated 10,000 American lives. Undeterred, President Bush ordered the military to continue preparations. The effort commenced on 17 January 1991 with an air campaign that quickly achieved air superiority over the Iraqi Air Force, which enabled other aircraft to decimate the Iraqi command and control nodes, fielded forces, and targets deep inside Iraq. After 39 days of airstrikes, the United States launched a combined airland offensive on 24 February 1991 against Saddam's forces in the

Kuwaiti Theater of Operations. Regular Iraqi forces fled pell-mell in their rush out of Kuwait, losing 1,700 destroyed tanks to aircraft, of which 1,000 fell to the A-10 Warthog alone.

President Bush authorized General Norman Schwarzkopf to terminate the offensive operation after 100 hours. American losses totaled less than 150 dead, of which a quarter was due to friendly fire. The Air Force saved thousands of American, coalition, and even Iraqi lives by exploiting the third dimension in a precise way that Saddam's forces could not counter. The same can be said for Operation ENDURING FREEDOM in Afghanistan.

When President George W. Bush launched operations in Afghanistan to respond to al Qaeda's 9/11 attacks, airpower (both US Air Force and US Navy) figured prominently in the effort to find, fix, and finish America's enemies. With assistance from Joint Special Operations teams and Northern Alliance Afghans on the ground, airpower forced the Taliban out of power in a matter of weeks with virtually no friendly losses. Over the course of the next 13 years of combat, not one forward operating base (FOB) or combat outpost (COP) was ever overrun by the enemy, but it was not for a lack of effort. While the number of attacks on FOBs and COPs repelled by airpower may not be told for some time, the ability of the Air Force to respond to each attack with devastating effects saved hundreds of lives with no Americans captured by enemy forces.

For example, when 90 soldiers were pinned down in a valley by enemy forces during a 13-hour fight on 28 June 2012 and two Joint Terminal Attack Controllers (JTAC) were shot, two A-10 pilots neutralized the threat by employing danger close ordnance (within close proximity to friendly forces) in weather conditions that only their aircraft could operate in.⁶⁸ When one of the JTACs met the pilots in the hospital a couple of days later, he told them, "You saved a lot of lives." Likewise, in another 13-hour fight in the Do Ab valley in Afghanistan on 25 May 2011,

Technical Sergeant Tavis Delaney, an Air Force Tactical Air Control Party (TACP) Specialist, called in 16 airstrikes and utilized 14 different airframes to kill an estimated 200-270 Taliban without losing a single American or Afghan in the unit he was assigned to.⁶⁹ Similarly, a six-man Marine Special Operations Team was saved by two A-10 pilots who earned the Distinguished Flying Cross with Valor for their efforts. Speaking of the experience, the team chief said he thought, “This is it. We're going to die. We're not going to make it out of this.” But Airmen saved his life and his team’s lives that day. Another Marine, speaking at the Air War College, put it like this:

For those of you that fly pointy-nosed things and never get to see the grunts on the ground after you drop your bomb, imagine Wrigley Field after you hit a four-shot homer. You guys don’t see it when you’re traveling at hundreds of miles an hour at 20,000 feet, and you think you’re just...dropping your JDAM, [but] the Marines on the ground react like they just won the World Series. You ought to hear the things they say to the enemy when that stuff detonates. You guys are heroes to them. You don’t see it every day, but that’s the reality when you guys pickle your loads and you kill a bunch of bad guys, because you’re doing it wholesale vice them doing it retail, and it’s a lot better. Marines love that stuff, and I wish you guys could see it. I really do, because too often you don’t appreciate the impact you have on the battlefield. You watch the camera afterwards and you’re like “Yeah, I hit the building or I hit the tree line.” Hey, you just saved a dozen Marines or a half-dozen Marines from taking casualties that day because they don’t have to go do it with a blow torch and grenades. Pretty big deal.⁷⁰

Close Air Support (CAS), a component of the Air Force’s Global Strike mission, is just one example of WHAT the Air Force has done very well for the last 13 years in Afghanistan, but the Air Force has largely ignored its WHY—focusing instead on being critical enablers—even though its WHY is something every Airmen should be proud of.

Conclusion

Whether gaining air superiority over the French countryside in World War II before the Normandy landings or over the desert sands of Iraq and Kuwait prior to the combined airland

campaign; whether providing warning of German movements during World War I or pattern of life analysis over Afghanistan; whether supplying millions of Berliners or hundreds of Iraqi Yazidis isolated on a mountain by the Islamic State; whether targeting German synthetic oil production and transportation nodes or Taliban and al Qaeda forces; and whether protecting the nation's shorelines or ensuring the right information to the right person at the right time, the Air Force's core missions preserve lives. Every Airman should understand WHY the Air Force does WHAT it does and what their individual role is; it is not sufficient to simply understand who they are, what they do, or how they contribute.⁷¹ WHY should permeate every facet and decision the Air Force makes, including acquisitions, personnel, readiness, education, training, and organization.⁷² Otherwise, the Air Force will continue to be misaligned, working from the outside of Sinek's Golden Circle, starting with WHAT, sometimes discussing HOW (although without consensus), but never inspiring with WHY.

Notes

¹ *America's Air Force: A Call to the Future*, July 2014, 5.

² Ibid.

³ Sinek's book will be familiar to many Airmen as it was part of the Chief of Staff of the Air Force's 2012 Professional Reading Program list. Simon Sinek, "How Great Leaders Inspire Action," Puget Sound, WA: TEDxPugetSound, September 2009, http://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?language=en#t-84070 (accessed 19 October 2014).

⁴ Simon Sinek, *Start with Why: How Great Leaders Inspire Everyone to Take Action*, paperback ed. (New York, NY: Portfolio / Penguin, 2011), 42.

⁵ Ibid., 67.

⁶ Ibid., 42.

⁷ Ibid.

⁸ Ibid., 182.

⁹ Ibid.

¹⁰ Ibid., 178, 182.

¹¹ Ibid., 56.

¹² Ibid., 55.

¹³ Ibid., 56.

¹⁴ Ibid., 39.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Paula G. Thornhill, "Over not Through: The Search for a Strong, Unified Culture for America's Airmen" (Santa Monica, CA: RAND Corporation, 2012), iii.

¹⁸ Ibid., 9.

¹⁹ Squadron Officer School Think Tank Class 14E, "Changing the Air Force Narrative" (Maxwell AFB, AL: Squadron Officer College, 28 September 2014), 26.

²⁰ Sinek, *Start with Why*, 214.

²¹ Ibid., 215

²² Julian P. Boyd, ed., *The Papers of Thomas Jefferson. Volume 1: 1760-1776* (Princeton, NJ: Princeton University Press, 1950), 243–247.

²³ Alfred F. Hurley, *Billy Mitchell: Crusader for Air Power* (Bloomington, IN: Indiana University Press, 1964, 1975), 17-18. Douglas Waller, *A Question of Loyalty* (New York, NY: Harper Perennial, 2005), 105.

²⁴ Hurley, *Billy Mitchell*, 21.

²⁵ Waller, *Question of Loyalty*, 105.

²⁶ Ibid., 106. Hurley, *Billy Mitchell*, 21. Mitchell would be recognized as a Junior Military Aviator in September, 1917, many months after he arrived in France and a year after his lessons.

²⁷ William Mitchell, *Memoirs of World War I: From Start to Finish of Our Greatest War* (New York, NY: Random House, 1960), 14-15.

²⁸ Michael S. Neiberg, “Nivelle Offensive (16 April—9 May 1917)” in *The Encyclopedia of World War I: A Political, Social, and Military History*, ed. Spencer C. Tucker (Santa Barbara, CA: ABC-CLIO Inc., 2005), 854-5.

²⁹ Mitchell, *Memoirs*, 18.

³⁰ *Ibid.*, 43, 46.

³¹ *Ibid.*, 59.

³² *Ibid.*, 61.

³³ *Ibid.*, 87.

³⁴ *Ibid.*, 89.

³⁵ *Ibid.*, 115.

³⁶ Hurley, *Billy Mitchell*, 23.

³⁷ Mitchell, *Memoirs*, 76.

³⁸ *Ibid.*, 80.

³⁹ *Ibid.*, 26.

⁴⁰ *Ibid.*, 57.

⁴¹ *Ibid.*, 59.

⁴² Hurley, *Billy Mitchell*, 23.

⁴³ William Mitchell, *Winged Defense*, Dover ed. (Mineola, NY: Dover Publications, 1988),

iv.

⁴⁴ William Mitchell, *Our Faulty Military Policy*, in Hurley, *Billy Mitchell*, 17.

⁴⁵ William Mitchell, “National Organization for War,” in Hurley, *Billy Mitchell*, 17.

⁴⁶ Sinek, *Start with Why*, 136.

⁴⁷ *Ibid.*, 66.

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ Alan Vick, *American Public is Less Inclined to Distinguish Among Service Branches*, RAND Project Air Force Report PAF-1P-239 (Santa Monica, CA: RAND, 30 June 2014), 2.

⁵² Gen Mark A. Welsh, III, chief of staff, US Air Force (address, Air Force Association Air & Space Conference and Technology Exposition, National Harbor, MD, 16 September 2014), available at <https://www.youtube.com/watch?v=pqEUtEMBQkc> (accessed 28 November 2014).

⁵³ Colin Gray, *Airpower for Strategic Effect* (Maxwell Air Force Base, AL: Air University Press, Air Force Research Institute, 2012), 298.

⁵⁴ Carroll V. Glines, *The Doolittle Raid: America's Daring First Strike Against Japan* (Atglen, PA: Schiffer Publishing, Ltd., 1991), 33-34.

⁵⁵ Donald L. Miller, *Masters of the Air: America's Bomber Boys Who Fought the Air War Against Nazi Germany* (New York, NY: Simon & Schuster, 2006), 248.

⁵⁶ Adolf Galland quoted in Jeffrey L. Ethell and Robert T. Sand, *World War II Fighters* (St. Paul, MN: MBI Publishing Company, 2002), 126.

⁵⁷ Roger G. Miller, *To Save a City: The Berlin Airlift 1948-1949* (Honolulu, HI: University Press of the Pacific, 2002), 47, 62-70.

⁵⁸ Thornhill, “Over Not Through,” 2.

⁵⁹ Sinek, *Start with Why*, 39.

⁶⁰ *Global Vigilance, Global Reach, Global Power for America*, August 2013, 1.

⁶¹ United States Air Force, “United States Air Force—It’s What We Do,” 29 August 2013, <https://www.youtube.com/watch?v=hPMA5QHynw8>, (accessed 28 November 2014).

⁶² Stanley McChrystal, “Generation Kill: A Conversation with Stanley McChrystal” *Foreign Affairs* 92, no. 2 (March/April 2013), 4.

⁶³ Ibid, 4.

⁶⁴ 2d Combat Camera Squadron, “Faithful to a Proud Heritage,” September 2012, <https://www.youtube.com/watch?v=kEOjCuQtINU>, (accessed 29 Nov 2014).

⁶⁵ Sinek, *Start with Why*, 215.

⁶⁶ Ibid., 67.

⁶⁷ Letter from Gen Larry O. Spencer, vice chief of staff, US Air Force, to Airmen in “Vice Chief of Staff Thanks Airmen for Successful 'Airmen Powered by Innovation' Call for Ideas,” Air Force News Service, 5 June 2013, <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/109088/vice-chief-of-staff-thanks-airmen-for-successful-airmen-powered-by-innovation-c.aspx> (accessed 27 December 2014).

⁶⁸ TSgt David Speicher, “Maryland Air Guard Pilots Awarded Distinguished Flying Cross for Actions in Afghanistan,” 175th Wing, Baltimore, MD, 11 December 2013, <http://www.ang.af.mil/news/story.asp?id=123373886> (accessed 28 Dec 2014). Jennifer H. Svan, “We’ve Got to Wait for this Weather to Pass,” *Stars and Stripes*, 12 June 2014, <http://www.stripes.com/news/special-reports/heroes/heroes-2014/we-ve-got-to-wait-for-this-weather-to-pass-1.288198>, (accessed 15 February 2015).

⁶⁹ Scott Fontaine, “TACPs Recall 13-Hour Battle that Saved Dozens,” originally published in *Air Force Times*, 19 August 2011, archived at *MilitaryTimes.com*, <http://archive.militarytimes.com/article/20110819/NEWS/108190304/TACPs-recall-13-hour-battle-that-saved-dozens> (accessed 15 February 2015).

⁷⁰ Col Scott Campbell, USMC, Chief of Staff, Marine Corps University, “Marine Operations” (lecture, Air War College, Maxwell AFB, AL, 10 February 2015). Author requested permission from briefer to attribute his comments.

⁷¹ *The World’s Greatest Air Force—Powered by Airmen, Fueled by Innovation: A Vision for the United States Air Force*, 9 January 2013, 4.

⁷² Sinek, *Start with Why*, 196.

Bibliography

- 2d Combat Camera Squadron. "Faithful to a Proud Heritage." September 2012, <https://www.youtube.com/watch?v=kEOjCuQtINU> (accessed 29 Nov 2014).
- America's Air Force: A Call to the Future*. July 2014.
- Boyd, Julian P. ed. *The Papers of Thomas Jefferson. Volume 1: 1760-1776*. Princeton, NJ: Princeton University Press, 1950.
- Builder, Carl H. *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force*. New Brunswick, NJ: Transaction Publishers, 1994.
- Campbell, Col Scott, chief of staff, Marine Corps University. "Marine Operations." Lecture, Air War College, Maxwell AFB, AL, 10 February 2015.
- Fontaine, Scott. "TACPs Recall 13-Hour Battle that Saved Dozens." Originally published in *Air Force Times*, 19 August 2011. Archived at *MilitaryTimes.com*. <http://archive.militarytimes.com/article/20110819/NEWS/108190304/TACPs-recall-13-hour-battle-that-saved-dozens> (accessed 15 February 2015).
- Galland, Adolf. Quoted in Ethell, Jeffrey L., and Robert T. Sand. *World War II Fighters*. St. Paul, MN: MBI Publishing Company, 2002.
- Glines, Carroll V. *The Doolittle Raid: America's Daring First Strike Against Japan*. Atglen, PA: Schiffer Publishing, Ltd., 1991.
- Global Vigilance, Global Reach, Global Power for America*. August 2013
- Gray, Colin S. *Airpower for Strategic Effect*. Maxwell AFB, AL: Air University Press, 2012.
- Hurley, Alfred F. *Billy Mitchell: Crusader for Air Power*. Bloomington, IN: Indiana University Press, 1964, 1975.
- McChrystal, Stanley. "Generation Kill: A Conversation with Stanley McChrystal." *Foreign Affairs* 92, no. 2 (March/April 2013): 2-8.
- Miller, Donald L. *Masters of the Air: America's Bomber Boys Who Fought the Air War Against Nazi Germany*. New York, NY: Simon & Schuster, 2006.
- Miller, Roger G. *To Save a City: The Berlin Airlift 1948-1949*. Honolulu, HI: University Press of the Pacific, 2002.
- Mitchell, William. *Memoirs of World War I: From Start to Finish of our Greatest War*. New York, NY: Random House, 1960.
- . *Winged Defense*. Dover ed. Mineola, NY: Dover Publications, 1988.
- . *Our Faulty Military Policy*. 1915. In Hurley, *Billy Mitchell*.
- . "National Organization for War." n.d. In Hurley, *Billy Mitchell*.
- Neiberg, Michael S. "Nivelle Offensive (16 April—9 May 1917)." In *The Encyclopedia of World War I: A Political, Social, and Military History*, edited by Spencer C. Tucker, 854-5. Santa Barbara, CA: ABC-CLIO Inc., 2005.
- Sinek, Simon. *Start with Why: How Great Leaders Inspire Everyone to Take Action*. Paperback ed. New York, NY: Portfolio / Penguin, 2011.
- . "How Great Leaders Inspire Action." TEDxPugetSound, September 2009, http://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?language=en#t-84070 (accessed 19 October 2014).
- Squadron Officer School Think Tank Class 14E. "Changing the Air Force Narrative." Paper presented to the vice chief of staff, US Air Force. Maxwell AFB, AL, 28 September 2014.

- Speicher, TSgt David. "Maryland Air Guard Pilots Awarded Distinguished Flying Cross for Actions in Afghanistan." 175th Wing, Baltimore, MD, 11 December 2013, <http://www.ang.af.mil/news/story.asp?id=123373886> (accessed 28 Dec 2014).
- Spencer, Gen Larry O., vice chief of staff, US Air Force. To Airmen. Letter, 5 June 2013. In "Vice Chief of Staff Thanks Airmen for Successful 'Airmen Powered by Innovation' Call for Ideas," Air Force News Service, <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/109088/vice-chief-of-staff-thanks-airmen-for-successful-airmen-powered-by-innovation-c.aspx> (accessed 27 December 2014).
- Svan, Jennifer H. "We've Got to Wait for this Weather to Pass." *Stars and Stripes*, 12 June 2014, <http://www.stripes.com/news/special-reports/heroes/heroes-2014/we-ve-got-to-wait-for-this-weather-to-pass-1.288198> (accessed 15 February 2015).
- The World's Greatest Air Force—Powered by Airmen, Fueled by Innovation: A Vision for the United States Air Force*. 9 January 2013.
- Thornhill, Paula G. "Over not Through: The Search for a Strong, Unified Culture for America's Airmen." Santa Monica, CA: RAND Corporation, 2012.
- United States Air Force. "United States Air Force—It's What We Do." 29 August 2013, <https://www.youtube.com/watch?v=hPMA5QHynw8> (accessed 28 November 2014).
- Vick, Alan. *American Public is Less Inclined to Distinguish Among Service Branches*. RAND Project Air Force Report PAF-1P-239, Santa Monica, CA: RAND, 30 June 2014.
- Waller, Douglas. *A Question of Loyalty*. New York, NY: Harper Perennial, 2005.
- Welsh, III, Gen Mark A. chief of staff, US Air Force. Address, Air Force Association Air and Space Conference and Technology Exposition, National Harbor, MD, 16 September 2014. <https://www.youtube.com/watch?v=pqEUtEMBQkc> (accessed 28 November 2014).